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19 September 1984

# China Report

PLANT AND INSTALLATION DATA

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19 September 1984

CHINA REPORT  
PLANT AND INSTALLATION DATA

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## I. METALLURGICAL INDUSTRY

Item: China National Nonferrous Metals Industry Corporation  
[0022 0948 2589 5331 6855 1466 1562 2814 0361 0674]

Location: Zhengzhou, Henan, PRC

Data: A new aluminum complex is to be built in Henan Province, Fei Ziwen, general manager of this corporation, announced here on 5 July. He told the national conference on technology in the aluminum industry held in Zhengzhou that his company and the Henan Provincial Government would co-finance the project and share the products. The complex would be built in Jiaozuo City, where water, electricity and communications were available. Henan boasts rich bauxite deposits, ranking second in the country. The Zhengzhou aluminum plant, set up in 1958, is now the largest aluminum oxide producer in China.

Source: Beijing XINHUA in English 1451 GMT 5 Jul 84 OW

Item: China Non-Ferrous Metal Industry Corporation  
[0022 0948 2589 5331 6855 1466 1561 2814 0361 0674]

Location: Zhengzhou, Henan, PRC

Data: An aluminum smelting technology developing center has been established here. It is the first organization to combine scientific research, design and production in China's nonferrous metal industry. The center, set up by this corporation, will be responsible for a technological development program of aluminum smelting. It will develop and spread new technology and offer technical consultancy and personnel training. A recent national meeting on the aluminum industry stressed that boosting non-ferrous metals was an urgent task and priority should be given to aluminum.

Source: Beijing XINHUA in English 1835 GMT 6 Jul 84 OW

Item: Hainan Iron Mine  
[3189 0589 6993 4349]

Location: Hainan Island, Guangdong, PRC

Data: Since the pig iron turned out by this mine's iron and steel mill for making high-quality nodular iron passed the technical examination in August last year, more than 130 enterprises throughout the country have placed their orders by mail at the end of 1983. At this juncture, the amount of pig iron called for in the 1984 production plan has been sold out. At present, only two enterprises in the country, the Benxi Iron and Steel Company in Liaoning and the iron and steel mill of this mine, are capable of producing the pig iron for making high-grade nodular iron. Because of the high iron contents of its raw material--iron ore, the Hainan Iron and Steel Mill ranks first in the country in the production of nodular iron.

Source: Haikou HAINAN RIBAO in Chinese 14 Jan 84 p 1

Item: Jinchuan Nickel Mine  
[6855 1557 6996 4349]

Location: Jinchuan, Gansu, PRC

Data: This mine, one of 93 key construction projects in the country, will undergo expansion. In early June 1984, the State Council approved an additional investment fund of 840 million yuan for the expansion project. Upon completion in 1990, this mine's nickel annual output reach 40,000 tons. The entire investment funds is expected to be recovered in three years' time.

Source: Shanghai WEN HUI BAO in Chinese 20 Jun 84 p 1

## II. TRANSPORTATION EQUIPMENT INDUSTRY

Item: Bee-Type Ultralight Aircraft Technology and Development Company  
[5778 5764 1709 6389 6535 0992 7378 2623 2111 2611 5280 5280 4099  
1455 0674 0674]

Location: Beijing, PRC

Data: This company was founded at the Beijing Aviation College on 7 July. The company is organized by the design, production, supply and other related departments of the college. The design and production of this type of aircraft will be expedited through division of labor. At present, Beijing Aviation College is making preparations in cooperation with other concerned units to set up an ultralight aircraft technology service company to train pilots and ground service personnel for customers of bee-type airplanes.

Source: Beijing XINHUA Domestic Service in Chinese 0839 GMT 9 Jul 84 OW

Item: Jiangnan Shipyard  
[3068 0589 6644 5307 0617]

Location: Shanghai, PRC

Data: The naming of the second computer-controlled 12,800-ton container ship built by this shipyard for a Singapore shipping company took place here on 19 June 1984. The first container ship, also named "Haihuang Luyu" [Sea Emperor-Green Jade] and built by this shipyard for the same Singapore company, was commissioned on 30 April this year.

Source: Shanghai WEN HUI BAO in Chinese 20 Jun 84 p 1

### III. ELECTRONIC AND PRECISION EQUIPMENT INDUSTRIES

Item: Nanjing Radio Plant  
[0589 0079 2477 7878 7193 0617]

Location: Nanjing, Jiangsu, PRC

Data: In less than five years, this plant has developed more than eighty kinds of new products, including various models of television sets, recorders, videorecorders, radio receivers, radio communications equipment, testing instruments and meters, electronic medical instruments, 3-meter and 1.8-meter satellite direct television receiving stations, and 50-kw uninterrupted power sources. The quality of these new products stands above that of similar products manufactured in the country. In the past five years, the industrial output value and taxes turned over to the State annually registered increases of 18.5 percent and 18.7 percent respectively. Sixty and seventy-two percent of its output value and profits from early 1983 to the end of June this year were derived from the sales of new products.

Source: Nanjing XINHUA RIBAO in Chinese 8 Jul 84 p 1

Item: Hongqi Instruments Plant  
[4767 2475 0308 0892 0617]

Location: Changsha, Hunan, PRC

Data: In collaboration with the National Defense University of Science and Technology, this plant has developed an all-sealed, small-sized, and high-precision strain sensor preamplification head which can take the place of the often-used strain gage and can be used directly with tall types of strain sensors. It is made of Chinese-built low drift, high-precision operational amplifier and precision resistance-capacitance components, which form its direct amplification circuit. This product has been evaluated by the department concerned and has been put into mass production.

Source: Beijing DIANZI SHIJIE [ELECTRONICS WORLD] in Chinese No. 6, 1984 p 7

Item: Tianjin Electronic Materials Institute  
[1131 3160 7193 1311 2624 2436 4282 4496 2076]

Location: Tianjin, PRC

Data: In cooperation with the Huainan No. 8 Institute, Yongchuan Photo-electric Components Institute, Guilin Laser Communications Institute, and the Tianjin Postal and Telecommunications Administrative Bureau, this institute, subordinate to the Ministry of Electronics Industry, has completed a 7-kilometer [tertiary] group shortwave optical fiber communications relay line and placed it into trial operation in Tianjin's urban telephone network. Since it was put into use during the second half of 1983, the subway long wave optical cable transmission system completed jointly by the Hebei Semi-conductor Institute and the Beijing Subway Company has been playing an excellent role in speedily, accurately, and safely dispatching vehicles.

Source: Beijing DIANZI SHIJIE [ELECTRONICS WORLD] in Chinese No. 6, 1984 p 7

Item: Plant No. 8400  
[0360 0934 7190 7190 0617]

Location: Nanping, Fujian, PRC

Data: This numbered plant's products include radio cassette recorder, radio, 4-band FM/AM 3W monophonic radio cassette recorder with two speakers, 4-band FM/AM 7W stereophonic radio cassette recorder and various desk radios, JLH-1 helium mass spectrometer leak detector with high sensitivity, GZ-1-A 1kw MW broadcasting transmitter, DH-3A 3kw broadcasting power sound amplifier, and DH-3A 4-probe tester. The factory also processes all kinds of communication transformers, chokes and C-type cores.

Ji Liuzhang [1323 3966 4545] is plant manager. Six hundred seventy-six people are employed here.

Source: Beijing ZHONGGUO GONGSHANG QIYE MINGLU [THE CHINA DIRECTORY OF INDUSTRY AND COMMERCE AND ECONOMIC ANNUAL 1982-1983] in Chinese p J-1



Item: Plant No. 8200  
[0360 0059 7190 7190 0617]

Location: Huadian Township, Huadian County, Jilin, PRC

Data: Model 76-2 3-band 11-transistor console radio phonograph, Model 76-2 3-band 11-transistor desk radio, Model XF-1 multipurpose signal generator, and various radio transmitters are among this plant's principal products.

Source: Beijing ZHONGGUO GONGSHANG QIYE MINGLU [THE CHINA DIRECTORY OF INDUSTRY AND COMMERCE AND ECONOMIC ANNUAL 1982-1983] in English p D314

Item: Baoying Radio Plant  
[0202 2019 2477 4848 7193 0617]

Location: Nanjing, Jiangsu, PRC

Data: The SYB-1 mercuryless digital pressure gage designed by the Nanjing Aeronautical Institute and built by this plant recently passed the technical evaluation test and has been put into batch production. It finds wide applications in the defense industry, scientific research design units, institutes of higher learning and departments of metrology. Its precision can reach 0.1%<sup>±</sup> [digit].

Source: Beijing DIANZI SHIJIE [ELECTRONICS WORLD] in Chinese No. 6, 1984 p 7

Item: Plant No. 8201  
[0360 0059 7190 0001]

Location: Tonghua City, Jilin, PRC

Data: Principal products:  
Silicon 2-w radio telephone  
WD-1 radio telephone  
CD-longwave radio telephone  
791-radio  
"Ling-zhi" 791 transistor AM/FM radio  
"Ling-zhi" 7T3- $\frac{1}{2}$  semi-conductor radio receiver  
BPQ-50 (60,400, 1000) controllable silicon voltage and frequency  
regulating power source  
Controllable silicon rectifying equipment of all models and  
specifications  
Number of employees and workers: 700  
Plant manager: Du Gengxin [2629 2577 2450]

Source: Beijing ZHONGGUO GONGSHANG QIYE MINGLU [THE CHINA DIRECTORY OF  
INDUSTRY AND COMMERCE AND ECONOMIC ANNUAL 1982-1983] in English p J-3

Item: Linqu Electronic Instruments Plant  
[5259 2593 7193 1311 0308 0892 0617]

Location: Linqu County, Shandong, PRC

Data: This plant is supplying the medium- and small-sized cement plants  
in the country with new electronic products to help them carry out  
technical reforms. At present, about one-third (over 1,050) medium-  
and small-sized cement enterprises in China are using the automatic  
measuring and controlling equipment manufactured by this plant.

Source: Yinchuan NINGXIA RIBAO in Chinese 11 Jun 84 p 1

Item: Wuxi Components Plant No. 4  
[2477 6932 0337 0115 0934 0617]

Location: Wuxi, Jiangsu, PRC

Data: This plant has developed a kind of high-germanium detector diode--AP803--which employs the point contact structure. It is primarily used in military equipment under 400MHz, radio fuse detector section, and the detector section of other radio electronic equipment requiring resistance to strong vibrations. Developed on the basis of wide frequency diodes, 2AP30 and 2AP31, the germanium detector diode has the following principal features: small reverse current,  $I_R = 5\mu A (V_R - 10V)$ ; capable of resisting strong impact and 20,000g in room temperature at 25°C and under 50°C and can resist 16,500g impact under 25°C room temperature. Two years of operations at a factory show that the results are excellent.

Source: Beijing DIANZI SHIJIE [ELECTRONICS WORLD] in Chinese No. 6, 1984 p 7

Item: Nanjing Institute of Electronic Technology  
[0589 0079 7193 1311 2111 2611 4282 4496 2076]

Location: Nanjing, PRC

Data: In cooperation with the PLA Institute of Communications Engineering, this institute has achieved a "breakthrough" by developing an advanced ground receiving equipment capable of receiving directly satellite television programs. The equipment is based on the most advanced PCM system which is available to only one country in the world. Presently, ground microwave relay-type transmission is being used in television broadcasting in the country, which falls far short of the needs in television quality and coverage. This new technical breakthrough has laid a foundation for the domestic design and development of advanced television broadcast ground receiving equipment system.

Source: Nanjing XINHUA RIBAO in Chinese 6 Apr 84 p 1

Item: Nanjing Radio Plant  
[0589 0079 2477 4848 7193 0617]

Location: Nanjing, Jiangsu, PRC

Data: This plant has recently signed a contract with a Japanese firm to build an advanced color television set production line. When completed, the production line will turn out annually 150,000 color television sets.

Source: Nanjing XINHUA RIBAO in Chinese 15 Jun 84 p 1

Item: Tianjin Radio Plant  
[1131 3160 2477 4848 7193 0617]

Location: Tianjin, PRC

Data: This state-owned plant has taken effective measures to boost its output of television sets. During the January-May 1984 period, its monthly output of TV sets has exceeded 10,000 sets, an 11.2-percent rise over the comparable period of 1983. Its color TV monthly output for the March-May 1984 period also surpassed 10,000 sets, a 190-percent increase over the like 1983 period.

Source: Tianjin TIANJIN RIBAO in Chinese 20 Jun 84 p 1

Item: Hangzhou Communications Equipment Plant  
[2635 1558 6639 0207 6080 0271 0617]

Location: Hangzhou, Zhejiang, PRC

Data: This plant developed the satellite communications "capacity expansion" project for the Beijing ground station, which can add 600 telephone lines to the ground station.

Source: Hangzhou ZHEJIANG RIBAO in Chinese 12 Jun 84 p 4

Item: Medical Research Institute of the PLA Navy  
[3189 6511 6829 1331 4282 4496 2076]

Location: Shanghai, PRC

Data: China's first diving respirator high pressure unmanned testing equipment has been successfully developed by this institute. It passed the State evaluation test on 11 July. Only a few developing countries possess such equipment. It does not require a person to take part in the test, is superior to the older respirator testing device, and can achieve the indexes which the older testing equipment cannot achieve.

Source: Shanghai JIEFANG RIBAO in Chinese 17 Jul 84 p 1

Item: Shaanxi Color Picture Tube Plant  
[7104 6007 7193 6018 1752 5331 7359 0288 4619 0617]

Location: Xianyang, Shaanxi, PRC

Data: The State Planning Commission has approved a three-year program for tripling production capacity at this plant, the country's large color television tube plant in Shaanxi Province.

By 1988, the plant will be able to produce three million 14- and 22-inch color television tubes a year, as against 960,000 at present. The project will include the improvement of the existing production line and installation of two new lines.

A contract for the first phase of the project was signed at the end of June with the Japanese Hitachi Company, which helped set up the plant in 1982.

Source: Beijing XINHUA in English 1251 GMT 17 Jul 84

Item: Beijing Military Region Plant  
[0554 0079 6511 0575 1562 0617]

Location: Beijing, PRC

Data: Peng Hui [1756 6540] of this plant published an article in this journal on the application of computer in change gear calculation of machine tools. No details concerning this defense plant's operations were given.

Source: Beijing JICHUANG [MACHINE TOOLS] in Chinese No. 6, 1984, p 16

#### IV. CHEMICAL INDUSTRY

Item: Tianjin Soda Plant  
[1131 3160 5685 2092 0617]

Location: Tianjin, PRC

Data: This plant, producing about one-fourth of the country's soda ash, is being expanded in this North China industrial city.

The two-year expansion program, listed as one of the state's major capital construction projects, involves a total investment of 145 million yuan.

Scheduled for completion in 1986, the plant will turn out 600,000 tons of soda ash a year, 150,000 tons more than the present output.

The expansion entails installing more than 200 pieces of the latest soda-producing equipment--20 of which will be imported--setting up new supply centers for water and raw materials, and building a residue treatment plant.

With a history of 70 years, this plant produces "Hongsanjiao" (Red Triangle) soda ash, a quality product that has twice been awarded State gold medals. The product is exported to more than 70 countries and regions.

Source: Beijing XINHUA in English 1148 GMT 1 Jul 84

Item: Dongfang Chemical Plant  
[2639 2455 0553 1562 0617]

Location: Dongxian County, Beijing, PRC

Data: The first plant of this project, with an annual capacity of 38,000 tons of acrylic acid and esters, completed its month's trial operation here today before going into official production.

The second plant with an annual capacity of 20,000 tons of acrylic resin is being fitted out.

The first plant was imported from Japan and the second made in China.

Located in the eastern outskirts of the capital, the chemical plant is a key state project. Acrylic products can be used in textiles, petroleum, building construction, foodstuffs and light industry.

Source: Beijing XINHUA in English 1129 GMT 19 Jun 84

## V. FUEL AND POWER INDUSTRIES

Item: Tuohai Power Station  
[.... .... 4099 7193 0617]

Location: Along the Kashi River in Xinjiang, PRC

Data: Earth was broken on the Kashi river yesterday to begin construction of the largest hydroelectric power station in the Xinjiang Uygur Autonomous Region.

This power station with a capacity of 50,000 kilowatts will generate 248 million kilowatt-hours of electricity a year after it is completed in 1988.

A tributary of the Ili River, the Kashi originates in the Tianshan mountains. Surveys showed that a series of 17 hydroelectric power stations with a combined capacity of 1.6 million kilowatts could be built on it.

Source: Beijing XINHUA in English 0902 GMT 2 Jul 84

Item: Luoyang Oil Refinery  
[3157 7122 3550 3111 0617]

Location: Luoyang, Henan, PRC

Data: Henan produced more than 3 million tons of oil in the first half of this year, thus ranking 5th in the country's 22 oil-producing provinces, regions and municipalities. This refinery, the country's first refinery, which will have an annual production capacity of 5 million tons, has now attained a production capacity of 1 million tons. The province had no petrochemical industry at all before liberation.

Source: Zhengzhou Henan Provincial Service in Mandarin 1230 GMT 23 Jul 84 HK



## VI. MACHINE BUILDING INDUSTRY

Item: Mindong Electromachinery Corporation  
[7044 2639 7193 2623 0361 0674]

Location: Fuzhou, Fujian, PRC

Data: With the help of scientific research units of the Ministry of Electronics Industry, the Fuzhou Radio Plant No. 2, and the Shanghai Internal Combustion Engine Plant, this corporation has developed China's first unattended and automatically controlled diesel generating unit designed for use by microwave communications intermediate relay stations in the remote, hilly, and desert areas. Such a generating unit can also be used as an emergency power source on railways and in hospitals, shopping centers, and field units.

Source: Fuzhou FUJIAN RIBAO in Chinese 30 Jun 84 p 1

Item: Haikou Electrical Machinery Plant  
[3189 0656 7193 2623 0617]

Location: Haikou, Hainan Island, Guangdong, PRC

Data: This plant has recently trial produced a new product, Y160 electrical machinery (prototype), which has been evaluated by the provincial department concerned. Preparations are under way to begin batch production of the new product during the second half of 1984. The successful trial manufacture of the Y160 electrical machine will open up broad prospects for the development of electrical machinery production and promote the growth of industrial and agricultural production on Hainan Island.

Source: Haikou HAINAN RIBAO in Chinese 3 Jun 84 p 1

Item: Changhai Machinery  
[7022 3189 2623 0892 0617]

Location: Guilin, Guizhou, PRC

Data: This plant's products include model 713 meteorological radar and various medium-sized and small radars for military and civilian purposes, BCC-01 electronic calculators, scientific arithmetic calculators, digital display men's and women's electronic watches, and 3 models of 12" black-and-white TV, radio-cassette recorders with one, two or four loudspeakers.

Source: Beijing ZHONGGUO GONGSHANG QIYE MINGLU [THE CHINA DIRECTORY OF INDUSTRY AND COMMERCE AND ECONOMIC ANNUAL 1982-1983] in English p J-1

Item: Lanzhou Petrochemical Machinery Plant  
[5695 1558 4258 3111 0553 1562 2623 0892 0617]

Location: Lanzhou, Gansu, PRC

Data: In 1983, this plant built China's first large thick-walled forge welded structure, a high-pressure hydrogenation reaction chamber. It was jointly designed by the No. 2 Oil Refining Design Institute of the Ministry of Petroleum Industry, the Lanzhou Oil Refinery, and the Fushun Oil Refinery No. 3 and incorporated the advanced foreign techniques in hydrogenation reaction chambers developed in recent years. Data of the ASME boiler and pressure vessel of the United States were used as reference in the design. Some of the principal parameters of the product are: designed pressure, 210kgf/cm<sup>2</sup>; designed wall temperature, 300°C; operating temperature, 450°C; weight, 172 tons; and equipment dimensions, Ø1800 x 150 x 24500 (tube body length, 18000)mm. Certain aspects of the equipment, such as materials, design, and manufacture, are up to the international level reached at the end of the seventies. [Photo available]

Source: Lanzhou HUAGONG LIANYOU JIXIE [CHEMICAL & PETROLEUM PROCESSING EQUIPMENT] in Chinese No. 2, 1984 p 35

Item: Tianjin Miniature Electric Motor Plant  
[1131 3160 1792 7193 2623 0617]

Location: Tianjin, PRC

Data: This plant has developed and manufactured four series of new-type asynchronous electric motors, the design of which has been evaluated and finalized. Compared to the old products, every 100,000 of these new products in use can save 2.07 million kilowatt hours of electricity. The primary technical indexes of the new motors are up to the international level of similar products and, at the same time, are highly interchangeable with products made abroad. This makes it easier to compete in the world market.

Source: Tianjin TIANJIN RIBAO in Chinese 21 Jun 84 p 1

Item: Dongfang Complete Power Station Equipment Corporation  
[2639 2455 7193 4541 2052 1152 6089 0271 0361 0674]

Location: Chengdu, Sichuan, PRC

Data: Subordinate to the Ministry of Machine-Building Industry, this newly established corporation accepts orders for the manufacture of complete sets of equipment for hydropower, thermal power, and nuclear power stations, large-sized motive power and reduction gears, feed pumps, turbines, DC and AC motors, miniature electric motors, accelerators, high and medium pressure valves, sugarcane pressing equipment, and other machinery products. The following plants are its subordinate units:

Dongfang Electromachinery Plant in Deyang City, Sichuan  
Dongfang Steam Turbine Plant in Hangwang, Deyang, Sichuan  
Dongfang Boiler Plant in Zigong City, Sichuan  
Dongfeng Electromachinery Plant in Wutongqiao, Leshan City, Sichuan

Source: Harbin DADIANJI JISHU [LARGE ELECTRIC MACHINE AND HYDRAULIC TURBINE]  
in Chinese No. 3, 1984 backcover

Item: Huanghe Machinery Plant  
[7806 3109 2623 2750 0617]

Location: Xi'an, Shaanxi, PRC

Data: A color television assembly line to handle 150,000 sets annually went into operation here today. The 734-meter automatic line was installed in eight and a half months by this plant in cooperation with the Japanese company, Toshiba. The first of its kind in Northwest China, the line will ease the local need. It has assembled 300 14-inch sets in trial operation starting this month. The plant expects to recover the investment of 7.7 million yuan (about 3.5 million U.S. dollars) within the next two years.

Source: Beijing XINHUA in English 1234 GMT 25 Jul 84 OW

Item: Shantou Valve Plant  
[3073 7333 7042 7024 0617]

Location: Shantou, Guangdong, PRC

Data: This plant has recently received congratulatory messages from the CPC Central Committee, State Council, and Central Military Commission for the contributions made to the recent success of the communications satellite launching by the non-return valve model (17-474-25) produced by workers of the plant.

The plant is one of the special valve producers assigned by the State. In the course of production, the plant constantly improved the product's quality, so that the product could meet the requirements for use in the communications satellite.

Source: Guangzhou Guangdong Provincial Service in Mandarin 1000 GMT 26 Jul 84

Item: Yingkou Washing Machine Plant  
[3602 0656 3156 5902 2623 0617]

Location: Yingkou City, Liaoning, PRC

Data: A production line capable of manufacturing 200,000 double-cylinder washing machines a year went into formal operation here today in cooperation with a Japanese firm.

The contract on the joint undertaking was signed in 1982 between this plant and the Japanese Matsushita Electric Industrial Company Ltd.

The line consists of eight automatic production sub-lines and four overhead transport lines.

With the help of the Japanese firm, the plant now has an annual capacity of producing 100,000 single-cylinder washing machines.

The double-cylinder washing machines trial produced by the plant have been issued fine quality certificates from the State Economic Commission and the Ministry of Foreign Economic Relations and Trade last year. The plant plans to raise its production capacity from the present 300,000 washing machines to one million machines by the year 1990.

Source: Beijing XINHUA, in English 1312 GMT 26 Jul 84

Item: Lanzhou Petrochemical Machinery Plant  
[5695 1558 4258 1444 0553 1562 2623 2750 0617]

Location: Lanzhou, Gansu, PRC

Data: This plant project has gone into full production building new machines capable of drilling oil wells 4,500 meters deep, following a successful examination of the machines by the Ministries of Machine-Building and Petroleum Industries. The machines are being manufactured by the plant, which is the largest producer of such equipment in China. According to the plant, testing and adjusting work on a new offshore rig designed to drill 6,000-meter wells is scheduled for completion by the end of this year. An official said the plant had manufactured more than 800 drilling machines--accounting for 82 percent of the total produced in China since it was founded in the 1950's. Production of drilling equipment can meet China's domestic demand despite increasing exploitation of oil resources, said an official of the Ministry of Machine-Building Industry.

Source: Beijing XINHUA in English 0924 GMT 22 Jun 84 OW

Item: Dalian Marine Diesel Engine Plant  
[1129 6647 5307 3938 2693 3111 2623 0617]

Location: Dalian, Liaoning, PRC

Data: A massive diesel engine, which will power a 65,000-ton ship, passed state examination today at this plant in northeast China. The engine, the largest of its kind ever produced in China, has an output of 17,280 horsepower, weighs 510 tons and is 11 meters high. It will be installed on a 65,000-ton oil tanker which the Dalian Shipyard produced for the Guangzhou Ocean-Shipping Bureau in Guangdong Province. The vessel is also the biggest in China in terms of tonnage.

Source: Beijing XINHUA in English 1321 GMT 27 Jul 84 OW

## VII. MISCELLANEOUS INDUSTRIES

Item: Hualin Rubber Plant  
[2901 2651 2895 5231 0617]

Location: Heilongjiang, PRC

Data: Despite the shortages of electric power and raw materials during the first half of 1984, this plant has managed to maintain a balanced output. By 30 June, it produced 440,000 tires, 53,000 tires more than the planned target. Four hundred twenty-seven thousand tires of 440,000 tires produced in the first 6 months of this year have been sold.

Source: Harbin HEILONGJIANG RIBAO in Chinese 11 Jul 84 p 1

Item: Guiyang Marble Quarry  
[6311 7122 1129 3810 4258 1034]

Location: Guiyang, Guizhou, PRC

Data: Equipment imported from Italy to turn out 50,000 square meters of marble slabs a year went into trial production today in this quarry.

It is the first enterprise in this remote province to import foreign equipment to upgrade its technology and boost production.

The equipment, valued at 500,000 U.S. dollars, was bought from two companies under S. Marco International Trade of Italy.

Guizhou, in a limestone area, has a lot of marble. Some of the Guiyang marble quarry's products are sold abroad.

The quarry plans to import more equipment to increase its annual production output of natural and artificial marbles to 240,000 square meters in 1986.

Source: Beijing XINHUA in English 1301 GMT 18 Jul 84

The following numbered plants were cited as outstanding units in the national defense science and technology industry for 1983:

|                            |                           |
|----------------------------|---------------------------|
| State-owned Plant No. 504  | State-owned Plant No. 523 |
| State-owned Plant No. 132  | State-owned Plant No. 513 |
| State-owned Plant No. 382  | State-owned Plant No. 382 |
| State-owned Plant No. 618  | State-owned Plant No. 216 |
| State-owned Plant No. 451  | State-owned Plant No. 845 |
| State-owned Plant No. 208  | State-owned Plant No. 307 |
| State-owned Plant No. 211  | State-owned Plant No. 566 |
| State-owned Plant No. 9344 |                           |

Also mentioned with this group of outstanding numbered plants was the Shanghai Broadcasting Equipment and Materials Plant.

Source: Beijing RENMIN RIBAO In Chinese 11 Jul 84 p 2



### XIII. PHOTOGRAPHS OF INDUSTRIAL FACILITIES

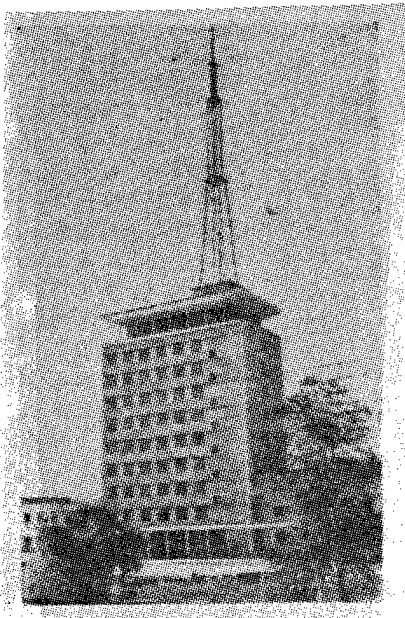


Fig. 1. Photograph of the newly built television broadcasting building in Yinchuan City, Ningxia. It is the broadcasting and television center of the region.

Source: Tianjin TIANJIN RIBAO in Chinese 31 Aug 84 p 3

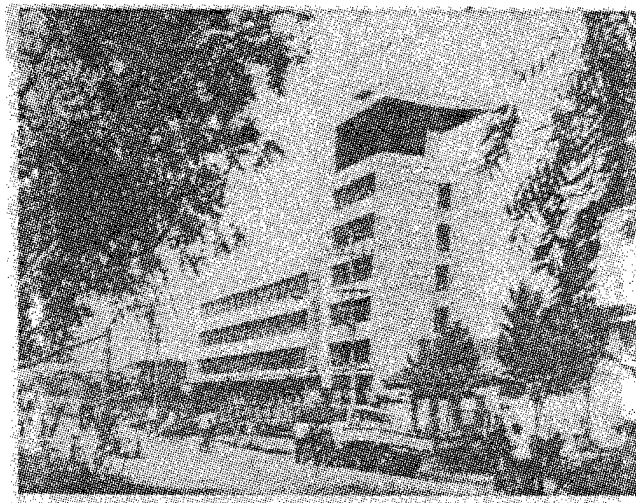


Fig. 2. Photo of the telecommunications building in Suihua City, Heilongjiang. Covering 4,700 square meters of building area, it has twelve service facilities, including automatic telephones, wave carrier telegraphs, and cables.

Source: Harbin HEILONGJIANG RIBAO in Chinese 10 Jul 84 p 1

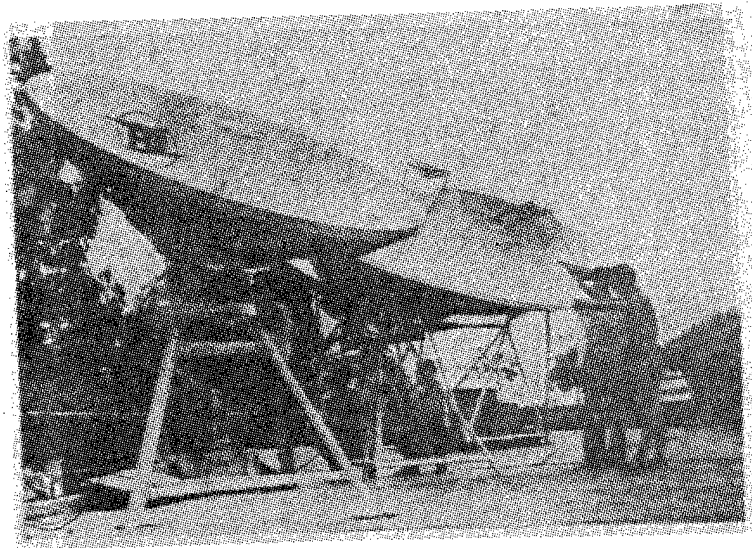


Fig. 3. The prototype of K frequency band 3-meter antenna satellite broadcast television receiving equipment successfully developed by the Ministry of Electronics Industry has received in Fuzhou, Fujian, the television images and accompanying sound transmitted by the broadcast satellite. Photo shows some of the receiving antennas.

Source: Fuzhou FUJIAN RIBAO in Chinese 9 Jul 84 p 1

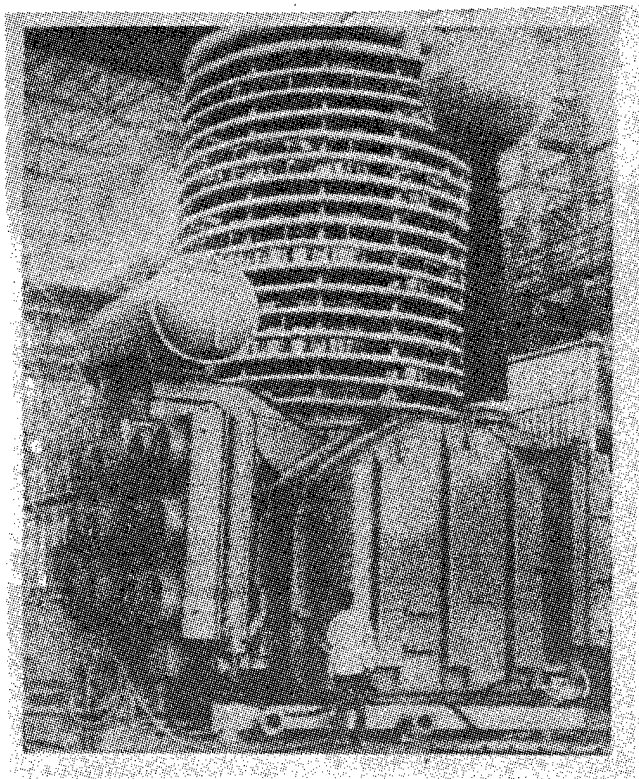


Fig. 4. Photograph of the 500,000-volts 250,000-KVA self-coupling voltage regulating transformer successfully trial manufactured by the Xi'an Transformer Electric Furnace Plant. It is a piece of key equipment for the 500,000 volts ultra-high voltage transmission and transformer line between Shanxi and Beijing.

Source: Xi'an SHAANXI RIBAO in Chinese 13 Jul 84 p 1

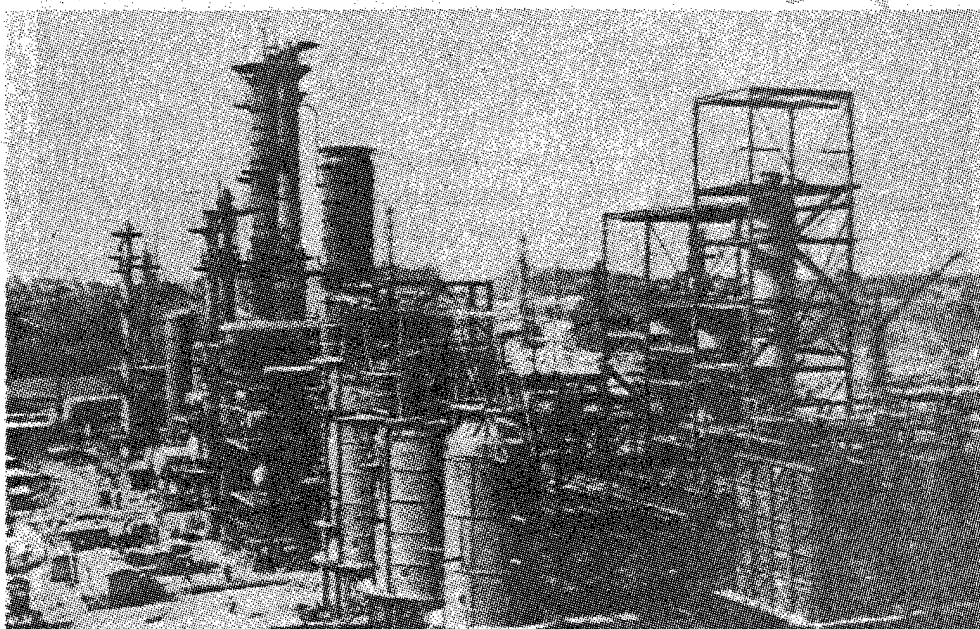


Fig. 5. Installation of the 800,000-ton hydrocracking facility at the Nanjing Oil Refinery has been completed.

Source: Beijing RENMIN RIBAO in Chinese 23 Jun 84 p 2

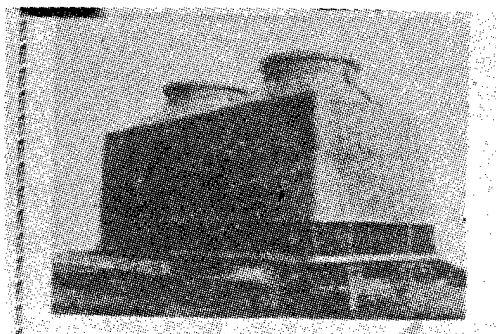


Fig. 6. Photograph of a modular-type glass fiber reinforced plastic cooling tower, the first of its kind built in China. Manufactured by the Jiaxing City Water Treatment Equipment Plant, the new-type cooling tower is less expensive and more efficient, as compared to similar types of cooling towers.

Source: Hangzhou ZHEJIANG RIBAO in Chinese 14 Jul 84 p 1

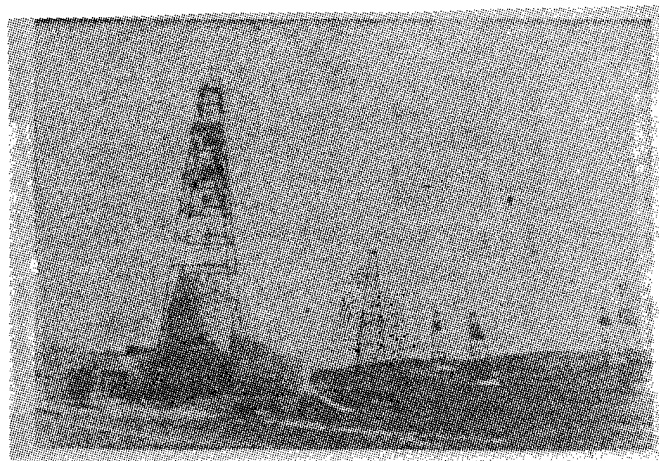


Fig. 7. A sectional view of a large copper-nickel mine discovered along the Ertrix River in Xinjiang. It ranks third among similar mines in the country in industrial reserves.

Source: Xi'an SHAANXI RIBAO in Chinese 14 Jul 84 p 4

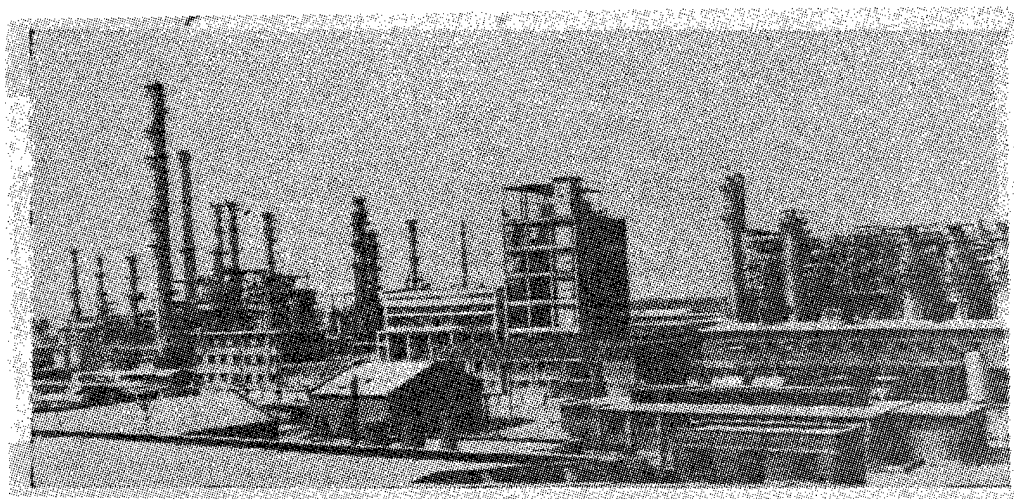


Fig. 8. A view of the Tianjin General Petrochemical Fiber Plant which was commissioned in January 1984. It has an annual polyester output capacity of 80,000 tons.

Source: Beijing RENMIN RIBAO in Chinese 31 Dec 83 p 2

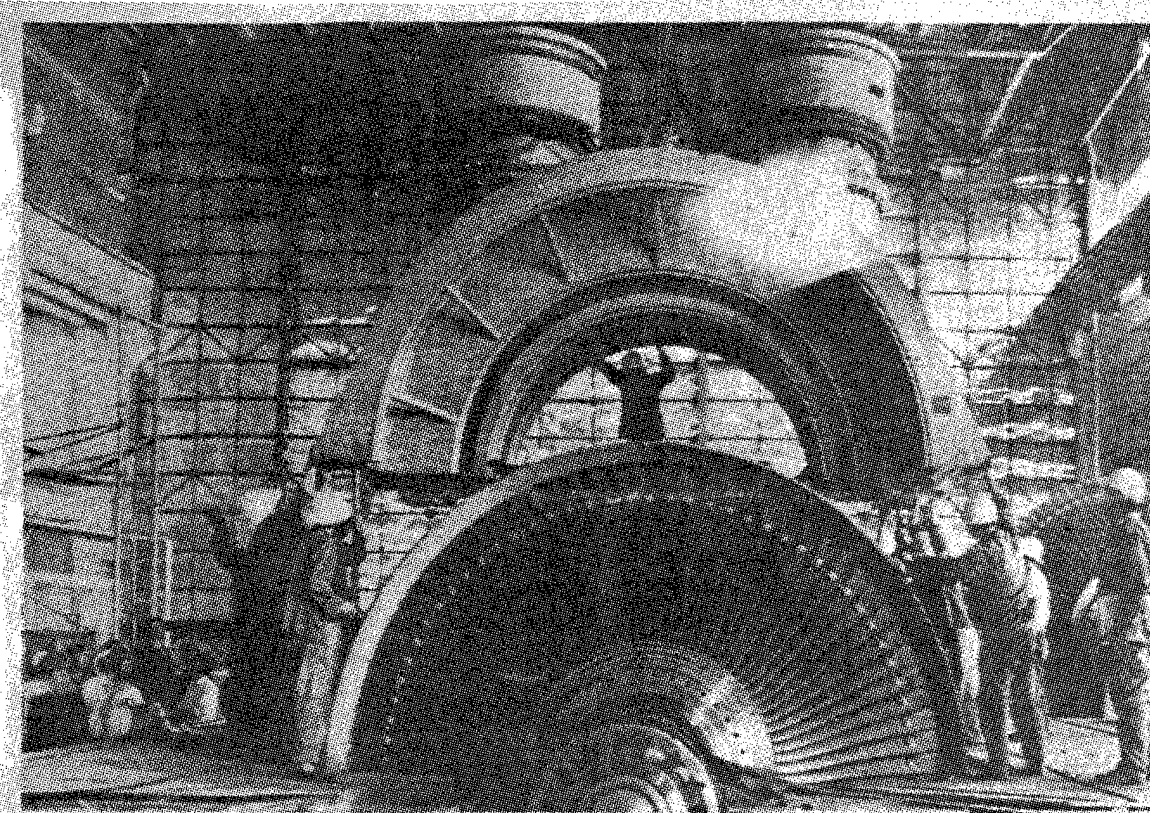


Fig. 9. Photo shows workers installing a steam turbine generating unit at the Yuanbaoshan Power Plant in Nei Mongol. This generating unit project with a single-unit capacity of 600,000 kilowatts is the largest of its kind being built in China.

Source: Beijing RENMIN RIBAO in Chinese 17 Jul 84 p 1



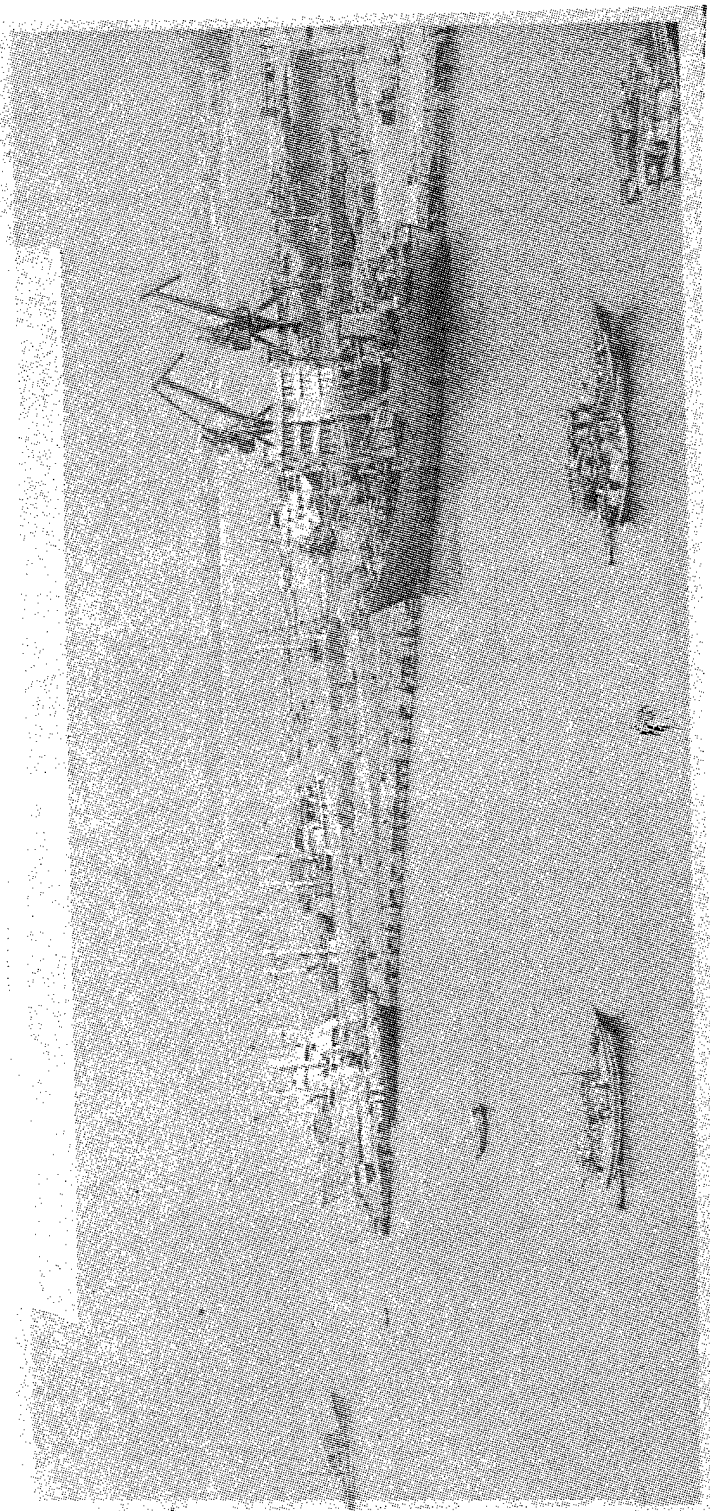
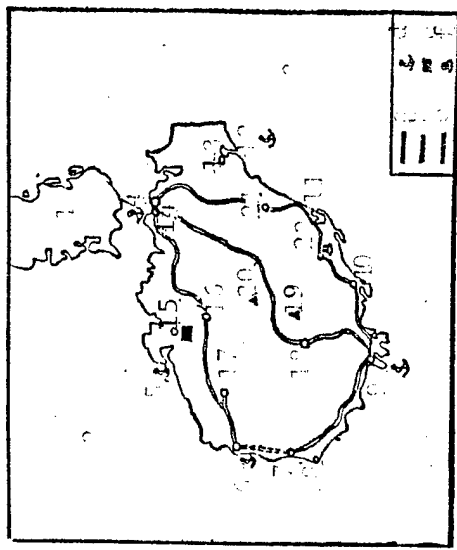


Fig. 10. A view of the Sanya Port, an important trading port on Hainan Island. It is equipped with two piers capable of docking 5,000-ton vessels.



Map of Hainan Island and Location of Sanya Port

- |                             |                         |                       |
|-----------------------------|-------------------------|-----------------------|
| 1. Leizhou Peninsula        | 12. Qinglan Gang        | a. Railway            |
| 2. Beibu Wan (Tongkin Gulf) | 13. Wenchang            | b. Unfinished railway |
| 3. South China Sea          | 14. Xiuying             | c. Highway            |
| 4. Haikou                   | 15. Changbo             | d. Port               |
| 5. Yangpu Gang              | 16. Dan Xian (Nada)     | e. Coal mine          |
| 6. Basuo                    | 17. Changjiang (Shiliu) | f. Hot spring         |
| 7. Lingtou                  | 18. Tongshi             |                       |
| 8. Yinggehai                | 19. Wuzhi Shan          |                       |
| 9. Sanya                    | 20. Limu Ling           |                       |
| 10. Lingshui                | 21. Qionghai            |                       |
| 11. Gangbei Gang            | 22. Xinglong            |                       |

Source: Hong Kong WEN WEI PO in Chinese 5 Jul 84 p 3

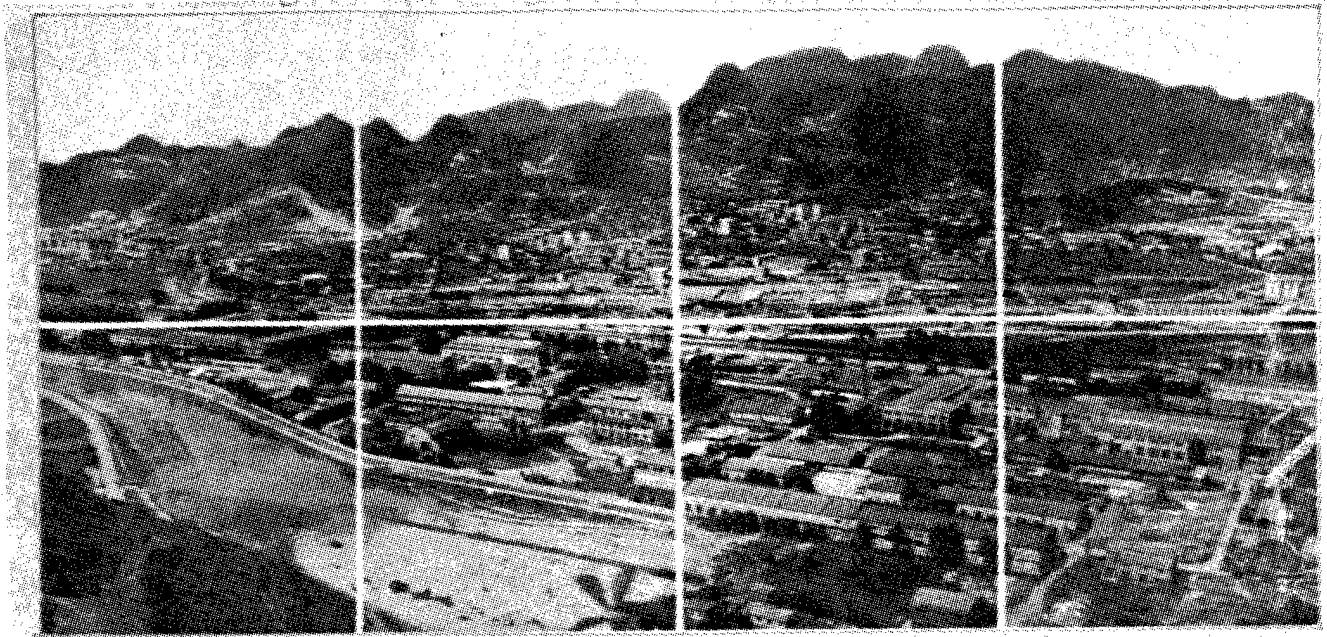


Fig. 11. Photograph of the Dongfang Machine Tool Plant in Duyun City, Guizhou Province. It is one of six key machine-building plants under the Ministry of Machine-Building Industry.

Source: Beijing JICHUANG (MACHINE TOOLS) in Chinese No. 6, 1984, frontcover



Fig. 12. Full view of the Luoyang Bearings Plant in Henan Province. The plant currently employs 17,000 employees and workers and is celebrating its thirtieth anniversary this year.

Source: Zhengzhou ZHOUCHEG (BEARING JOURNAL) in Chinese No. 3, 1984, frontcover



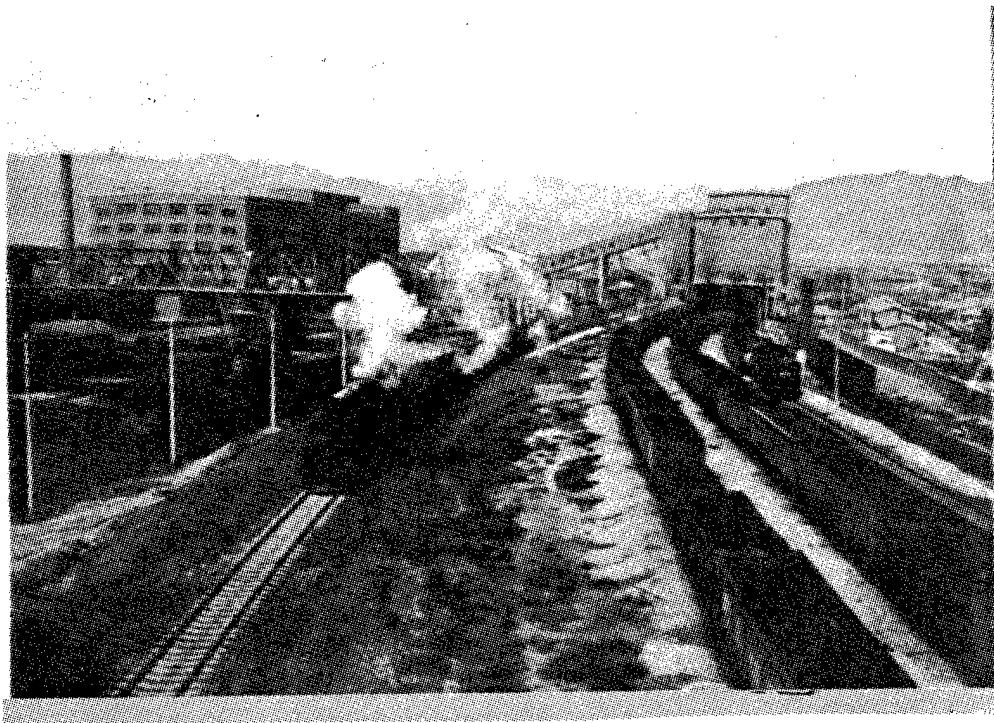


Fig. 13. Coal is being shipped out from the Shizuishan Colliery in the Ningxia Hui Autonomous Region.

Source: Beijing MINZU HUABAO (NATIONALITIES PICTORIAL) in Chinese No. 4, 1984, inside backcover

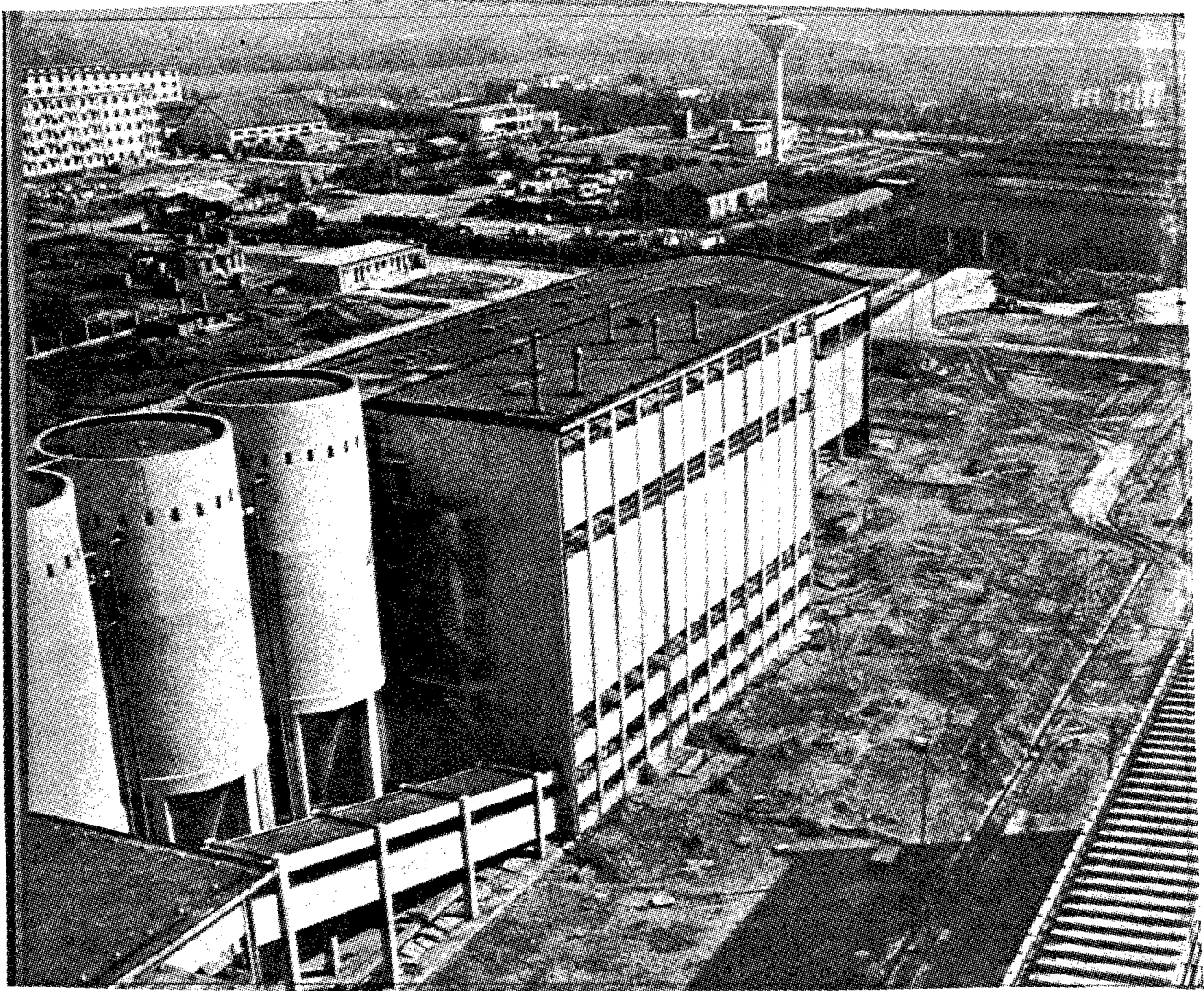


Fig. 14. The Nanping Plate Glass Plant in Guangxi, one of the key State construction projects, is fast taking shape. Its design annual plate glass output capacity is 1.2 million standard crates.

Source: Beijing MINZU HUABAO (NATIONALITIES PICTORIAL) in Chinese No. 6, 1984, p 2